

## ENHANCED FIELD EMISSION FROM CARBON NANOTUBES MIXED WITH PARTICLES

### ABSTRACT

5           The present invention is directed toward cathodes and cathode materials  
comprising carbon nanotubes (CNTs) and particles. The present invention is also  
directed toward field emission devices comprising a cathode of the present invention,  
as well as methods for making these cathodes. In some embodiments, the cathode of  
the present invention is used in a field emission display. The invention also comprises  
10 a method of depositing a layer of CNTs and particles onto a substrate to form a cathode  
of the present invention, as well as a method of controlling the density of CNTs used in  
this mixed layer in an effort to optimize the field emission properties of the resulting  
layer for field emission display applications.

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